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ABSTRACT

Implementation of the first U.S. television program rating system based on identifying content that could be viewed by specific age groups began in January, 1997. This exploratory survey examined the context of how young people responded to the ratings system. Participating in the May 1997 survey were 462 students in fourth, eighth, and tenth grades from a midsized, urban, midwestern city. Approximately half of the sample was female. The sample included 185 African-Americans, 113 Caucasian-American, 17 Hispanic-Americans, 13 Native-Americans, 7 Asian-Americans, 44 "other," and 62 participants with a combination of racial backgrounds. The age groups were compared regarding: (1) their level of awareness about and attention to the ratings, (2) their understanding of the ratings and their ability to interpret them correctly, (3) their attitudes toward the ratings, and (4) their disposition to use the ratings information in considering program options. The findings indicated that age and parental mediation were the most significant predictors of attention, attitudes, and use of the ratings. Gender, socioeconomic status, and ethnicity were not key elements in understanding the responses of young people. Fourth graders claimed to have more positive attitudes, pay more attention to, and use the ratings more than either the eighth or tenth graders. However, the fourth graders were least likely to correctly identify the ratings' age-specific meanings. Overall, young people had low interest in, marginally positive attitudes for, and only partially correct understanding of the ratings, and they had little use of the ratings for program selection. (Contains 31 references.) (Author/KB)

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# Young Viewers' Responses to Television Program Ratings

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Abstract

Implementation of the first U.S. television program rating system which was based on identifying content that could be viewed by specific age groups began in January, 1997. The purpose of this study was to look at the context of how young people responded to the ratings system. Three age groups in the 4th, 8th, and 10th grades were compared to determine (a) their level of awareness about and attention to the ratings (b) whether they understood the ratings enough to be able to interpret them correctly; (c) their attitudes toward the ratings; and (d) their disposition to use the ratings information in considering program options. Results indicate that age and parental mediation were the most significant predictors of attention, attitudes, and use of the ratings. Gender, socio-economic status, and ethnicity were not key elements in understanding the responses of young people. The youngest respondents claimed to have more positive attitudes, pay more attention to, and use the ratings more than either the 8th or 10th graders.

# Young Viewers' Responses to Television Program Ratings

In January, 1997, the U.S. television industry entered into a social compact with the federal government. Information about individual programs would be provided at the beginning of each show to inform viewers about programs that are more or less appropriate for different age groups, based on their inclusion of violent content, sexual content, and/or strong language. This system remained in effect until October, 1997, when the compact was extended to include more specific information about the content of each show, a change accepted by most, but not all television networks. In return for this second version of the program ratings, the government agreed to permit the system to be tested without further modification for some indefinite time.

The United States became the third English language nation to present a television ratings system, all based fundamentally on age groupings, and all with a violence-sensitive component. The Canadian experience with television ratings has been coupled with market testing of v-chip technology in three trial communities during 1994-1996. Nine initial levels of television program violence were reduced to five, anchored by 'comedic' violence on the one end and 'graphic' violence on the other. Sexual content and language also are rated, and the viewers receive a single rating which encompasses the violence level, as well as sex and language. This system is 'on hold' because of difficulties with the technology and the ratings.

The Australian experience is an active one, with three ratings designations keyed not to specific content, but to 'themes and concepts' and to 'explicit and intense' material that may require adult guidance. Their system also specifies the time of day at which programs in different ratings classifications may be shown. Research evidence as to viewer awareness, understanding, and utility of these systems has been minimal.

Implementation of the U.S. rating system in January, 1997, yielded a critical opportunity to examine viewer responses to the ratings. The original ratings were developed by an industry committee, chaired by Jack Valenti. The proposed evaluation from that committee was to be based

on a survey of U.S. adults; no research was planned to focus on the responses of young people to the ratings -- the ultimate targets of the ratings themselves. This project studies how aware and attentive young viewers are to the ratings, what they understand about the ratings, and if and how they use the ratings to select or reject TV shows.

The study was conducted in the spring of 1997, and is therefore based on the original program ratings information -- that which was age-based and not content-specific.

What do we know of the impact of these ratings and advisories on viewers? To date, most research has considered the "forbidden fruit hypothesis" (Christenson, 1992) as an explanation for why there may be a potential boomerang effect of the ratings on viewing behaviors whether they be movie ratings (Austin, 1981), TV warning labels (Bushman, 1997), or TV ratings systems (Krcmar & Cantor, 1997). This hypothesis proposes that the ratings may influence viewers to watch rather than refrain from viewing inappropriate shows. It is based on Brehm's (1972) theory of psychological reactance, which predicts people who perceive their behavioral freedom to be threatened or restricted will become motivated to restore their freedom by engaging in the restricted behavior. It is akin to the 'banned in Boston' dream of every author that their book be banned by the Archdiocese of Boston, to assure that it is soon sold out in bookstores. Therefore, content may be more attractive to children (or adults) if parents (or other authorities) restrict access or forbid viewing of it.

Somewhat mixed findings emerge regarding the efficacy of labels to tempt youngsters to watch the forbidden. Cantor and Harrison (1996) found that certain advisories, such as "parental discretion advised," and the MPAA ratings "PG-13" and "R" made programs and movies more attractive to boys, especially older boys (10-14 years). However, a phone survey study with parents of children in kindergarten, second, fourth, and sixth grades found that the parents' forbidding of violent programs was not related significantly to the parent's report of the child's interest in any of four violent genres -- classic cartoons, action cartoons, live-action programs and reality-based action shows (Cantor and Nathanson, 1997). However, these data originated with the parents, and not the child viewers themselves, and cannot be taken as direct refutation of the

forbidden fruit hypothesis. We suspect that parents are not good reporters of their children's television interests, especially by the time they are in the latter years of elementary school. Abelman (1985) supports this with his finding that, even when parents often are present, there is little active involvement in the consumption and interpretation of TV content.

Hamilton (1994) examined the impact of viewer discretion warnings on audiences for prime-time network movies. Programs that carried discretionary warnings were watched less frequently by children aged 2-11, but the warnings had no effect on either teens or adults. This study controlled for the content type and the scheduling of the movies, but as pointed out by Krcmar and Cantor, "it is unclear from these results if children or their parents were responsible for limiting viewing by children" (1997, p. 395), and so it fails as a direct test of that hypothesis. To test the hypothesis more rigorously, Bushman (1997) exposed subjects to three conditions: warning label ("This film contains violence. Viewer discretion is advised."), information label (This film contains violence."), or no label. Subjects in the warning label group wanted to watch the violent films more than those in either of the other two conditions, which did not differ. This effect was similar for all age groups from 9-21.

The question remains then, whether the system of TV ratings now offered (or offered at the time of our study) will be perceived as a warning which in turn offers "forbidden fruit." Labels that are descriptive (e.g., this contains violence) have not been shown to induce the same boomerang. The studies reported have used the discretionary warning label or the movie ratings as the basis for media choice decisions. We take a first look at the original TV rating system as responded to by young viewers in their natural viewing environment.

Individual Differences and Parental Influence

As indicated, Cantor (1996) reported that young boys were more likely than young girls to choose age-inappropriate shows to view in response to hypothetical ratings, so the issue as to how children of different ages and different genders respond to genuine ratings is very salient. Peter Hart & Associates surveyed 10-17 year olds and their parents in 1996 for the Annenberg Policy Research Center; more than one-third reported watching shows their parents would not approve of.

Only 18% of these youth said their parents provided a 'great deal of TV supervision' compared to 31% of the parents' who claimed that level of supervision. More than half the youth had their own TV set, affording greater opportunity to make their own viewing decisions (Hart, 1996).

Whether one believes that the program information in the ratings is adequate or not, it remains the only universally available information. Likely targeted to parents who may wish to deter their children from some programs and guide them to others, the ratings information also is directly accessible to the children. They are able to view it on the screen, or read about it in assorted guides. Given no prior ratings system for U.S. television, this study establishes a benchmark for comparing the findings of subsequent studies. Inasmuch as future studies will evolve from the now modified ratings system, responses to that system can be understood better in the context of how youth responded to the original scheme. The overarching research question for this study was:

What are the responses of young people to the initial television ratings system?

In particular, we wished to determine (a) their level of awareness about and attention to the ratings; (b) whether they understood the ratings enough to be able to interpret them correctly; (c) their attitudes toward the ratings; and (d) their disposition to use the ratings information in considering program options.

At the time we conducted the field work for this study, four months of ratings had been available. This study examined the four dimensions in the context of a set of mediating variables and background characteristics. These will be examined in terms of the youth's age and gender, primarily. Figure 1 provides a graphic of the study model. The key responses examined were:

Awareness/Attention. This variable measures basic knowledge of the existence of ratings. To what extent have children heard or seen ratings? Where did they find out about them? Do they recall seeing any ratings? If seen, how much attention is given to them?

Attitudes toward ratings. This examines two aspects of how young people feel about the rating system.

-- Usefulness of ratings. Do young people believe that ratings are a positive development? How do they think the ratings should be used? For what ages?

-- Assessment of ratings system. Does the child agree with the current ratings structure? Are we rating the right things? Does the child agree with how his/her preferred shows are being rated?

Understanding. This measures the depth of knowledge a child has about the ratings. Are children aware of the various ratings and their meaning? Can they order the ratings by age groupings? Do they know what is being rated? What kinds of shows get ratings and which do not?

Use. This dimension examines uses that young people may make of the ratings.

-- Youth use. Do they use the ratings to make viewing choices? Are the ratings a guide for programs to avoid or do age-inappropriate ratings piqué their interest?

-- Parental mediation. Does the child indicate that a parent has discussed the ratings? Has a parent recommended or banned shows because of the ratings?

-- Youth compliance. Do they comply with parental rules when the parent is absent? Are they concerned about their parents' viewing preferences for them?

Our focus on background characteristics centered on the age and gender of young viewers. Inasmuch as the ratings specify age-specific groups, we chose to examine the responses of youngsters from early in elementary school through high school, anticipating that different responses, if any, would emerge across this age range; the chosen age groups fall between the age-specific ratings categories, save for the preschool category, which we did not study in this analysis. Our second focus was on gender, aware that young boys and young girls have different television preferences (Jacklin, 1989) and these become more marked as they grow into adolescence.

Figure 1 identifies the remainder of the study's foci. In addition to age and gender, background characteristics included ethnicity, socioeconomic status, family size and family structure. Research demonstrates that minority youth (Greenberg & Brand, 1994; Brown,

Bauman, Lentz, & Koch, 1987), those from lower SES families (Holman & Braithwaite, 1982; Schramm , Lyle, & Parker, 1961; Tindall & Reid, 1975, those in larger families (Sarlo, Jason, & Lonack, 1988), and those in one-parent households (Brown, Childers, Bauman, & Koch, 1990) devote more time to television in general.

A set of mediating variables became part of the study model as we anticipated the influences which pertain to the child's television experiences and responses to TV. These are clustered in the likely social influence of family members and friends. Family components include parental oversight of the child's television behavior, including discussion about TV programs as well as specific rules for TV use, parental styles of discipline and the child's concerns about responses to his/her violation of parental expectations. Siblings, if any, also could influence the youth's responses to the ratings and their television behavior. In addition, television viewing is often a social experience for young people, shared with friends, and the potential influence of those friends was included in the study model. Finally, the child's overall use of television was included, as a potential moderator of responses to the new ratings information.

The bulk of this study is exploratory and designed to establish a benchmark for subsequent research which examines the impact of the ratings on the television experiences of both youth and adults; thus, we have posed more research questions than formal hypotheses. This study orientation became even more prevalent as the second wave of changes to the rating system were announced midway through our analysis. Nevertheless, we did set out to test a subset of hypotheses from this framework, including the following:

1. Awareness of and attention to the ratings will be positively related to the age of the youth.
2. Attitudes toward the ratings will be negatively related to age.
3. Understanding and knowledge of the ratings will be positively related to age.
4. Use of the ratings will be negatively related to age, except for seeking information about age-inappropriate ratings (misuse) which will be positively related to age.

5. Females will be more aware, more knowledgeable, express more positive attitudes, and make greater use of the ratings information.

Additional background characteristics were included more so as control variables than predictor variables. The mediating variables were examined in the context of our multiple regression analyses, to determine their contribution to predicting the youngsters' responses to the ratings, in addition to that originating with their background characteristics.

## Method

This study was conducted in a midsize, urban, midwestern city, in May, 1997. Questionnaire administration was supervised by graduate students in school classrooms. Students were given approximately one hour to complete the survey. Participation was voluntary and anonymous. Two pretests of draft instruments were completed with adolescents ranging in age from middle school to college level. Discussion followed these administrations to see if the students understood the wording, comprehended the questions, liked the verbal format, and to determine the time needed to complete the instrument.

Final implementation of the survey yielded 462 usable questionnaires. The sample consists of three age ranges represented by students in the 4th, 8th, and 10th grades. There were 138 students in the 4th grade between the ages of 9 and 11, averaging 10. The 8th grade provided 151 participants whose age range fell between 13 and 15, averaging 13.7. One hundred and seventy-three students in their sophomore year of high school were in the 15 to 18 year age range, averaging 16.8. Fifty-two percent of the respondents were female and 48% were males. Across the age ranges, students were of similar ethnic backgrounds. There were 185 respondents of African-American origin, 113 Caucasian-American, 17 Hispanic-American, 13 Native-Americans, 7 Asian-Americans, 44 stated they were from another ethnic group, and 62 identified themselves as a combination of racial backgrounds.

Variables and Scales

The survey architecture consisted of 20 groups of items that can be separated into 20 scales and three single demographic items to be used in this analysis. These variables were used to determine young people's responses to the television ratings.

Reliabilities in the form of Cronbach's coefficient alpha for internal consistency were calculated for each scale; where available, we provide the alpha from the scale's originators. However, most scales were created for this particular study and for younger respondents. Some original scales were modified, to accommodate younger respondents and to replace out-of-date terminology.

All scales were confirmed as unidimensional using principal axis factoring with varimax rotation in SPSS. Confirmations were based on predetermined allocation of items. Cross factor loadings were minimal and items remained with scales based on content validity. Sample items for each scale and variable follow:

Independent Variables

Demographics. Respondents were asked for their age, gender, and ethnicity.

Family Size. This is the sum of the number of additional siblings one lives with.

Parental Composition. Students could report up to 16 different parental compositions, inclusive of original parents, step-parents and guardians. Most common configurations were two original parents, mother only, and any two parents.

Family SES. This was a three item scale, summing the number of bedrooms, bathrooms and television sets in their home. The alpha was .62

Mediating Variables

Television Exposure. Five questions were summed into one index. The index score corresponds to the exposure to television; as the score increases, exposure to television increases. The scale range can be between 0 (no exposure) to 50 (more than 4 hours a day for each of the questions). These questions originated from the Young People & Their Orientation to Mass Media

international study (Greenberg, Tokinoya, Ku, & Li, 1989), referred to as the KAM study. The coefficient alpha is .81. Here is one item:

Yesterday, after school, before supper, how long did you watch TV?

0 1/2 1 11/2 2 21/2 3 31/2 4 more

The remaining items, using the same response scale, asked for viewing yesterday after supper, and viewing on last Saturday, in the morning, afternoon, and evening.

Decision Making. A three-item, four-point summed ratings scale measured a youth's perceived influence in deciding family media use. A low rating of 3 indicated low decision making influence and a rating of 12 would indicate that the individual had high decision making influence over media choices. The coefficient alpha was .60. One item dealt with television and the other two with rental video and out of home movie going decisions, e.g.,

How often do you get to pick the TV show when you watch TV with your family?

VERY OFTEN OFTEN SOMETIMES NEVER

Parental Mediation. Five items were summed to indicate the perception of parental mediation with respect to TV. The scale ranges from 5 to 20. The higher the score, the more perceived parental mediation. These questions were drawn from parental mediation literature. (Reid, 1979; Lin & Atkin, 1989; Robertson, 1979; Greenberg & Linsangan, 1993). The internal consistency coefficient was .78. One such item was:

How often does a parent suggest TV programs for you to watch?

VERY OFTEN OFTEN SOMETIMES NEVER

The other items asked how often parents try to help you understand what you see on TV, told you that you could not watch certain programs, watched TV with you, and told you something on TV isn't really true.

Rules in the Home. For four items, dichotomous responses were summed to create an index about television rules in the home. This scale originated in the KAM study. The higher the scale score, the more rules in the home. The scale ranges from 4 (no rules) to 8 (many rules). The

alpha is .63. Items dealt with how late one could watch TV on school nights and on Saturday night, how many hours on Saturday, and

Are there television rules in your home about ...

how many hours you can watch TV on school days? YES NO

Parental Strictness. This five item scale measures how strict adolescents' perceive their parents to be. The first four-items originated in a socialization study of young people to TV advertising (Greenberg, Rampoldi, Sherry, Tokinoya, & Chen, 1995). The original alpha was .8 and this study also achieves a .80 alpha. The scale scores range from 5 (not at all strict) to 20 (very strict).

How strict is one of your parents on who you go out with?

VERY STRICT STRICT A LITTLE STRICT NOT STRICT

The other items dealt with strictness in terms of what is worn, where you go, who your friends are, and when you have to be home.

Concern about Punishment. This four item, four-point scale measures adolescent's concerns if they did not do something their parents told them to do. The original conception of this scale was from Korzenny (1975), the alpha was .57 in a replicated study (Greenberg, et al, 1995). The items were rewritten to deal with punishment fears, rather than types of physical punishment. Higher scores (maximum of 16) indicate great worry about noncompliance and low scores (minimum of 4) represent little worry. The alpha is .80. The format was as follows:

Suppose a parent asked you to do something and you didn't do it...

How much would you worry that a parent might punish you?

A LOT A LITTLE NOT MUCH NOT AT ALL

The other items dealt with concern that you would be grounded, lose privileges, or that a parent would yell at you.

Sibling Influence on TV watching. This two item index reflects the influence siblings have over the selection of TV shows the respondent watches. The scores range from 2 (little influence) to 8 (large influence). The correlation between the two items is .30.

How often does a brother or sister not let you watch a TV show you want to watch?

How often do you **not** let a brother or sister watch certain TV shows?

VERY OFTEN OFTEN SOMETIMES NEVER

Sibling Influence on using TV ratings. Two items were summed to create an index to measure the influence siblings have in using the ratings to influence a TV program choice of the respondent. The scores range from 2 (low use of ratings to choose programs) to 8 (high use). The correlation between these two items is .58. Response categories were the same as with Sibling Influence on TV watching.

How often does a brother or sister look at the TV ratings when picking a TV show they want to watch?

How often does a brother or sister use the TV ratings when picking a show for you to watch?

Friends' Influence. This six item, four-point summed ratings scale indicates the frequency of peer interactions. The scale ranges from 6 (low interaction) to 24 (very frequent interaction). The coefficient alpha was .82.

How often do you go over to a friend's house?

VERY OFTEN OFTEN SOMETIMES NEVER

The other items assessed frequency of having friends to your house, doing something with friends on weekends and after school, watching TV and going to movies together.

Dependent Variables

Attention to Ratings. Three items were summed to measure how much attention was given to the ratings. A score of 3 indicates no attention is paid to the ratings and a score of 12 referring to large amounts of attention. Cronbach's alpha for this scale was .73.

How often do you try to see what the rating is when the show starts?

VERY OFTEN OFTEN SOMETIMES NEVER

Respondents also were asked how often they looked up the rating for a show in a newspaper or TV magazine before watching the show, and how much attention they gave to the ratings in general.

Attitude Toward Ratings. This four item, four-point summed scale measures respondents opinions toward the ratings. The scale ranged from 4 (negative opinion) to 16 (positive opinion). The coefficient alpha is .74.

Do you think that TV shows should have these ratings on them?

DEFINITELY YES YES NO DEFINITELY NO

The other questions asked if the respondent liked having the ratings on the shows, if they helped anyone pick shows to watch, and whether the ratings given have been the right ratings for the shows.

Understanding the Ratings. This measure consists of 12 items scored as either correct (1) or not (0) and are summed to indicate the level of understanding respondents had toward what types of content the ratings reflected. A low score on the scale would indicate little understanding of the ratings, while a high score refers to more understanding. The scale ranged from 0 to 12, with an coefficient alpha of .51. Here is a sample item:

Does the rating tell if there is sex in the show? YES NO NOT SURE

The other items asked if the rating indicated the presence of violence and bad language, and the remaining items asked if ratings appeared on TV shows at night, on soaps, commercials, game shows, cartoons, talk shows, the news, and TV movies. A final item asked who does the ratings, and offered four options -- the government, TV people, experts, and viewers.

Knowledge of Ratings. These five items measure a respondents knowledge as to what the ratings mean. The items were scored as either correct or incorrect according to the specified definitions of the ratings. The scale ranged from 0 (no correct answers) to 5 (all correctly identified). The coefficient alpha was .75.

Here are the TV ratings:

TV-Y TV-M TV-PGTV-Y7 TV-G TV-14

Which rating means the show is OK for all young kids to watch? _____

The other items asked for the rating which meant the show should be watched with a parent, is OK for children who are 7 years or older, is OK for children who are 14 years or older, or whether the show is only for adults.

General Use of Ratings. Five items were summed to measure respondents general use of the ratings for choosing TV programs to watch. The scale ranged between 5 and 20; with higher scores indicating more use of TV ratings. The coefficient alpha was .85.

How much have you yourself used the TV ratings to pick shows to watch?

A LOT A LITTLE NOT MUCH NOT AT ALL

The other items asked about using the ratings to pick shows not to watch, to pick shows you shouldn't watch, and to pick shows to tell someone else either to watch or not watch.

Specific Use of Ratings. Six items were summed to measure and individual's use of specific ratings for picking TV shows. The scale ranged from 6 to 24; higher scores indicating more use of the ratings for choosing programs. Respondents who circled the "not sure" response were not included in this scale (201 students were not sure about these specific ratings). The alpha for this scale, excluding those who were not sure, was .70.

How often do you watch TV shows with a TV-PG rating:

VERY OFTEN OFTEN SOMETIMES NEVER NOT SURE

The six additional items asked about the other six ratings categories.

Misuse of Ratings. This three item, three-point summed scale measures the perception that other students use the ratings to pick programs they know they shouldn't watch. Higher scores indicate a greater perception of misuse of the ratings. The scale ranges from 3 to 9. The coefficient alpha was .69.

Do you think kids in elementary school look at the ratings to pick shows they know they should not watch? YES MAYBE NO

The other two questions asked about kids in middle school and high school.

## Results

This section (1) provides descriptive information for each of the measures we developed which examine different aspects of the television ratings; (2) analyzes those same measures for possible gender and age/grade differences; and (3) determines which among the antecedent and mediating variables provide the best set of predictors for each ratings measure. These analyses are based on 462 students in one urban school system, from 4th (30% of the cases), 8th (33%) and 10th (37%) grade classrooms. Females comprised 52% and males 48% of the study group.

### Ratings Measures

Attention to the ratings. This was a three item scale, e.g., "How often do you try to see what the rating is when the show starts?" With items scored from 1 to 4 and a scale midpoint of 7.5, the obtained mean of 5.6 indicates low attention across the entire group of respondents, falling slightly under an average response of 'sometimes' to this set of questions. Table 1 provides the analysis of variance results for this variable. Girls and boys pay equal and equally low attention to the ratings. Differences by grade in school are large and significant ($p<.001$), especially between the 4th graders and the two older grade groups. The younger students claim to pay more attention to the program ratings information; yet, on an absolute basis, their average attention score is near the scale's midpoint.

Attitude toward the ratings. Four items tapped the students' opinions about the ratings, e.g., "Do you think the TV shows should have these ratings on them?" The average score among the respondents was 10.7 on a scale that ranged from 4-16, thus being slightly above the 10.0 scale midpoint, or barely on the positive side in evaluation of the ratings. Table 2 provides results which indicate no difference between the boys' and girls' attitudes, but a significant difference by grade grouping. The 4th graders expressed the most positive attitude and the 8th graders the least positive attitude; actually the 8th graders were at the scale's midpoint -- neither positive nor negative in their attitude. The 4th graders' average score of 11.3 placed that age group distinctly on the positive side of the measure.

Understanding the ratings. This measure consisted of 12 items which asked the respondents what information was contained in the ratings, e.g., "Does the rating tell if there is sex in the show?" and which shows contained ratings, e.g., "Is there a rating on the soaps....the news. These items were scored as correct or incorrect and the student's score reflected the total number of correct answers.

Fifty-two percent of the respondents correctly indicated that the ratings were based in part on the presence of sexual content in the show, 70% correct with regard to bad language and 72% correct about violence. Fifty percent reported correctly that TV shows at night had the ratings, 78% knew that they were on TV movies, 47% correct about cartoons, 43% about afternoon talk shows, 24% knew the ratings were on soaps, and 12% knew about game shows; 76% reported that the ratings were not on commercials and 59% knew the ratings were not on the news. Only 21% correctly identified the origin of the ratings information.

Table 3 contains the results of our analysis of this variable. On average, students answered 6 or one-half of the questions correctly, and the score were equivalent across all grade groups and between the girls and boys.

Knowledge about the ratings. Here, we listed all six age-based ratings symbols, and asked the youths to correctly indicate the meaning of five of them, e.g., "Which rating means that the show is OK for all young kids to watch?" For this measure, then, the maximum correct score was 5, and the respondents averaged 3.4.

For descriptive purposes, we will indicate how well the respondents did in identifying the correct interpretation of each rating. Fifty two percent correctly identified TV-Y; 64% were correct on TV-PG; 77% for TV-Y7; 80% for TV-14; and 71% for TV MA. They did best in identifying the ratings which contained age information.

The strongest finding for this variable in Table 4 is the highly significant grade difference, where the 8th and 10th graders scored substantially higher than their 4th grade counterparts. Boys and girls did not differ overall. However, the 4th grade girls did have greater knowledge than the 4th grade boys. If one examines the table as a whole, the 4th grade boys were singularly deficient

on this knowledge measure, whereas the 8th and 10th grade boys did somewhat better than their female peers.

General use of the ratings. This assessment was oriented to the youths' use of the ratings to choose shows to watch or not to watch, and consisted of five items. With a scale range of 5-20, the average score was only 8.8, well below the scale's midpoint of 12.5 and falling between response categories that indicated the ratings were being used 'not much' to 'not at all.' Table 5 provides further evidence of this for the different grades studied. The trend is linear, with the 4th graders claiming more use than the 8th graders, who in turn, claimed slightly more use than the 10 graders. However, the truly substantial difference rests with the 4th graders, who related 60% greater use of the ratings for these purposes than the older youth. Again, the boys did not differ from the girls in overall general use of the ratings.

Specific use of the ratings. Here, respondents were asked how often they watched TV shows with different specific ratings, e.g., TV-PG, and they were asked this for each of six different ratings. However, because we included a response category of 'not sure' in addition to four frequency responses (very often....never), we were able to include only 261 respondents in this specific analysis. For these youths, their average score was 14.4, which falls just below the scale's midpoint of 15, and reflects a response midway between 'often' and 'sometimes.' Table 6 indicates that there are no gender differences for this variable, but the linear trend among the different grades is significant and indicates that 4th graders reported more specific use than 8th graders, followed by 10th graders.

Misuse of the ratings. We asked respondents three questions about possible misuse of the ratings information, e.g., "Do you think kids in elementary school look at the ratings to pick shows they know they should not watch?" Overall, the youth did not believe this was likely, given an average score of 4.9 and a scale range of 3-9, the average was well below the scale's midpoint of 6. However, the 4th graders believed that such misuse was more likely than the older schoolchildren. Table 7 evidences a highly significant difference among the grade groupings, in which the 4th graders are convincingly discrepant in their estimate of misuse.

The Regression Analyses

These analyses help clarify the relationships among our sets of variables, and are based on the study model in Figure 1. Entered as the first block of variables were those demographic characteristics identified as most likely to be related to the young respondents' television experiences:

...age (school grade)

...gender

...ethnicity

...socioeconomic status

...family size

...family structure

Ethnicity and family structure were dummy coded in these analyses; ethnicity consisted of those who claimed they were African American vs. all others; family structure consisted of those who claimed they had only one original parent vs. all others. Although dummy codes could have been replicated for other ethnic and family structure subsets, e.g., two original parents vs. all others, we chose the more conservative method to avoid potential inflation of the multiple correlation and constructed only one dummy variable for these categorical measures.

The second block of variables consisted of the set of mediating variables described earlier and analyzed in terms gender/grade differences. These included general exposure to television, parental mediation of television viewing, home rules about television, parental strictness, concern about parental punishment, interaction with friends, sibling influence over television watching, sibling influence over the use of the television ratings, and the respondent's independence of decision-making.

Results are presented here for each of the television ratings outcome variables. Table 8 contains the details of the analyses.

Attention to the ratings. Forty percent of the variance could be accounted for (R=.631) by the two blocks of predictors, five of which were statistically significant. The strongest

demographic predictors were being in the 4th grade and having a large family. Crucial mediating variables were the extent to which one's parents mediated the television viewing experience, and the influence of siblings over both the use of the ratings and what was watched on television.

Attitude toward the ratings. A weaker, but significant multiple correlation (R=.348), explained 12 percent of the variance in this outcome variable. Here, smaller family size and stronger parental mediation were the two significant predictors.

Understanding the ratings. None of the predictor variables in either block explained a significant amount of variance in the young people's abilities to understand the ratings. Earlier evidence that neither grade nor gender were predictors is supplemented by evidence than none of the other variables in this study do any better.

Knowledge about the ratings. Students in the upper grade levels and those with greater concern that they might be punished by their parents for misbehaving were the two significant predictors of knowledge about the ratings. The set of variables has a multiple correlation of .370, or only 13% of the variance.

General use of the ratings. A multiple correlation of .673 (46% of the variance) for this outcome variable is best explained by the demographic variables of larger family size and by students in the lower grade levels. Concurrently, the mediating variables of sibling influence in the use of the ratings, and direct parental mediation of their television behavior have significant positive contributions to general use of the ratings, whereas the influence of friends shows a negative tendency away from general use.

Specific use of the ratings. There is a lower multiple correlation here of .459. Those in one-parent families demonstrate greater specific use of the ratings, supplemented by several mediating variables, beginning with positive contributions from direct parental mediation, an independence in individual decision-making, and the influence of siblings over television behavior; again, the influence of friends is counter to this use of the ratings.

Misuse of the ratings. Greater misuse is best associated with being in lower grade levels, living in a two parent household, and less overall watching of television. Stronger parental

mediation on the other hand reportedly contributes to more misuse, a result which fails to fit our model expectations. For this outcome, the overall R=.400.

The most consistent predictors across the entire set of outcome variables are:

...parental mediation of television behavior (significant in five of the seven prediction equations),

...the age/grade distinction (in four of the seven),

...family size (in three),

...the role of siblings, where there were siblings, in influencing either television watching or the use of the ratings (in three).

Thus, there is a moderate degree of parsimony and consistency in what this particular set of variables can predict, and in the utility of the model. At the same time, several variables anticipated to be useful, do not contribute to our understanding. The final section of this paper explores both issues.

## Summary and Discussion

The youngest respondents claimed to give the most attention to the ratings, had the most positive attitudes, and made the most use of them for general, specific and 'misuse' purposes, but were least likely to correctly identify their age-specific meanings. The findings for attitudes, general use, specific use and knowledge supported specific hypotheses. The findings for attention and misuse of the ratings were non-supportive and direct reversals to expectations that those two aspects would be most prevalent among the older youth. The predictions were based on the notion that the older youth would be sufficiently sophisticated to look out for and seek age-inappropriate shows; in contrast, it was the younger group, apparently less naive than we suspected, who were more demonstrable in those behaviors.

Why would the youngest group who pay more attention, have more positive attitudes toward, and use the ratings more, be less able to identify correctly what they mean? Perhaps, they know which programs they can watch based on the symbols, but do not have a descriptive meaning for them. For instance, "Mom says I can watch programs with a TV-Y on them."

Younger students may be more likely to accept such a rule at face value. However, this does not imply that the older students who pay little attention, hold ambivalent opinions, and do not use the ratings have complete knowledge of what the ratings mean. It may just indicate that the older viewers are more sophisticated in matching the symbols to text definitions. They are more experienced in matching tests. In addition, older students have used the movie symbol system longer and may be applying analogous relationships. Some support for this explanation come from the fact that there was no significant difference between the age groups when answering if specific types of shows have ratings or what type of content the ratings entail (e.g. sex, bad language, violence). In addition, students identified the values which contain age information the best and this indicates the use of matching strategies.

The primary target of the ratings may well be the set of younger television viewers, even younger than those participating in this study. The ratings may be keyed to parents of preschool and early elementary children, where the parents are more likely to be able to influence their television behavior. During this study, three of the ratings categories were oriented toward young viewers. However, three other categories targeted the older viewers, so why weren't they using the ratings? The best bet is that by the time young people are in the 8th and 10th grades, their parents are no longer controlling television for them, and they may not be too happy with television's attempt to act in loci parentis. If they have begun to engage in the general process of acquiring independence from authority, they may well ignore, reject, and avoid television ratings information. This would make misuse of the ratings a moot point for the older students.

Younger siblings reported to have more influence over their TV viewing and ratings use by their older siblings. Thus, if both parents and siblings are more involved in the younger student's viewing, it may give young children a sense of the importance of TV and influence them to pay more attention to such television related phenomena as the ratings, have a more positive attitude, and increase their use of ratings.

Gender as a predictor was a general washout. By itself, it predicted none of the responses to our assessment of the new television ratings. And in the regression analyses, it did not

reemerge as a locator variable. Has television become the 'great gender equalizer?' Equal attention, similar attitudes, equivalent knowledge, understanding and use between boys and girls spanning the age range from 9 to 16 seems fairly remarkable for just about any issue. But television may not be like any other issue. It is universally available and accessible to American youth. In addition, a majority of American youth have their own personal TV set to use to be able to selectively attend to any program they desire. The ratings do not suggest that some shows are for boys and others for girls.

We also looked for relationships between age/grade and gender with the set of mediating variables. The girls differed from the boys in terms of indicating that their parents were more strict with them ($p<.05$), and that they were more concerned about the consequences of misbehavior on their part ($p<.001$); there also was a tendency for the girls to report less overall television viewing than the boys ($p<.10$), a finding truncated by no gender difference among the 10 graders, a moderate difference among 8th graders, and a very large difference (2 hours on average) among the 4th graders. Seemingly, part of life's evolution for the adolescent in the U.S. is the development of a gender-equivalent interest in television.

This study was conducted four months after the ratings began. Given the ballyhoo accompanying the onset of the ratings, one might have expected this to still be a period of considerable interest in the ratings. It was not such a period with young people, to the extent the groups studied here can be considered representative. On the basis of our measures, their attention was low, their attitude only marginally positive, their understanding of what content was included in the ratings and what kinds of television shows were rated was at the 50% correct mark (or 50% incorrect). Their use of the ratings to choose shows to watch was well below the midpoint, and reflected little general use. Their response to specific watching of shows with different ratings can be interpreted as 'sometimes we do and sometimes we don't.' Even mis-use, looking for shows to watch outside their age bracket, was estimated as low by them. This estimation does not suggest support for the forbidden fruit thesis. The best face one can put on these responses is that the

ratings were still new and these young people were still orienting to them; the more likely face is that the ratings had been seen and were not very salient for them.

The children are of course one half of the equation in this television ratings issue; the other half is their parents. Studies of adult responses to the ratings, such as evaluations of the system, have been promised by the Valenti Committee, which created the ratings. A more comprehensive study would link the children's responses to those of their own parents and look for similarities and differences within family members. What happens when parents and children disagree about what are appropriate shows to watch? When does the child make independent decisions about television? What happens when older and/or younger siblings are in the same viewing context? Let alone, what does one do when Mom and Dad have alternative stances on these same questions?

In addition, these findings became dated when the modified ratings system began less than a month ago (at the time of writing this paper). The addition of symbols for violence, sex, language, fantasy violence and adult discussion adds information and complexity. How is the additional information perceived? Is it more or less important to the child and to the parents than the age-appropriate suggestions? Does it provide a clearer signal about the programs? And is that signal a 'red' light for the parent and a 'green' light for the young viewer?

Conceptually, where does this take us? The individual variable results and multiple regression outcomes focus us quite squarely on family and parent styles in conjunction with the ages of the children in the household. If we can truly set aside SES, ethnicity, and gender as key elements in understanding the responses and orientations of young people to the television rating system, we have acquired considerable conceptual parsimony. Then, we would wish to expand on those domains of influence, e.g., parental disciplinary styles, modes of parent-child interaction, the differences between single-child and multiple child homes, and at the same time determine more precisely at what development levels and stages (for which age is too often used as a surrogate measure) the children exercise increasing authority over their own television behaviors.

Although there has been a moratorium for the time being on additional changes to the rating system, and some broadcasters are not making the content-specific ratings available, continuing

studies of the introduction of this information are best done now, rather than retrospectively. Soon enough, a v-chip will begin to appear in American homes, albeit slowly, and that will add a new factor to the monitoring of television shows. These innovations, which imply both greater control and greater freedom, may impact the relationship between viewers and their television exposure. Perhaps this technology will provide what the movie system already has, age restraints that are enforceable. The movie ratings may have more salience due to the ticket masters who prevent children from attending age inappropriate materials. Likewise, the television ratings may become more useful when the meaning of them become more tangible.

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Figure 1: STUDY MODEL OF TV PROGRAM RATINGS

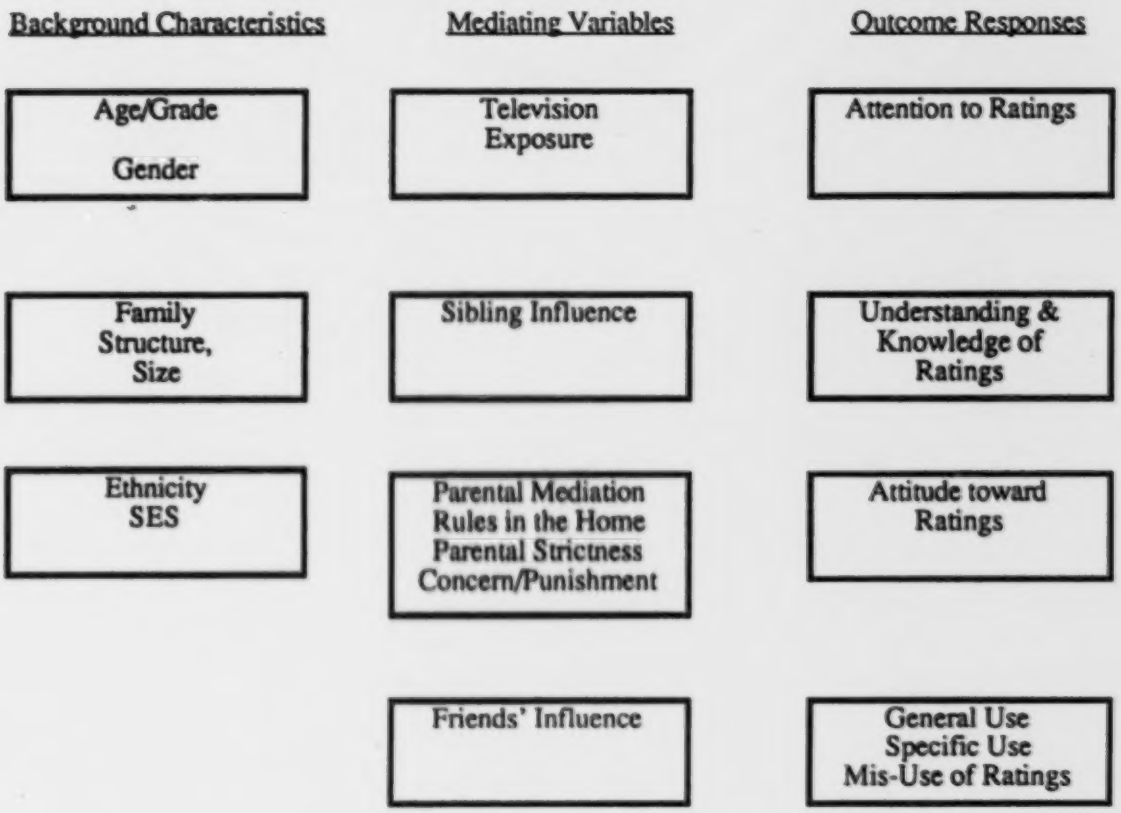

Table 1

Attention to the Ratings by Grade and Gender

| Gender: | Grade: 4th | 8th | 10th |
|---|---|---|---|
| Girls | 7.69 | 5.16 | 4.74 |
| Boys | 7.15 | 4.86 | 4.71 |

| Sources of Variance | df | Mean Square | F | p |
|---|---|---|---|---|
| Grade | 2 | 317.60 | 74.91 | <.001 |
| Gender | 1 | 8.58 | 2.06 | n.s. |
| Grade by Gender | 2 | 2.47 | .58 | n.s. |

*The higher the score, the greater the attention to the ratings

Table 2

Attitude Toward the Ratings by Grade and Gender

| Gender: | Grade: 4th | 8th | 10th |
|---|---|---|---|
| Girls | 11.31 | 10.14 | 10.81 |
| Boys | 11.37 | 9.85 | 10.72 |

| Sources of Variance | df | Mean Square | F | p |
|---|---|---|---|---|
| Grade | 2 | 64.68 | 10.80 | <.001 |
| Gender | 1 | 1.38 | .23 | n.s. |
| Grade by Gender | 2 | 1.15 | .19 | n.s. |

*The higher the score, the more positive the attitude toward the ratings

Table 3

Understanding the Ratings by Grade and Gender

| Gender: | Grade: 4th | 8th | 10th |
|---|---|---|---|
| Girls | 6.19 | 6.11 | 6.10 |
| Boys | 6.37 | 5.83 | 6.39 |

| Sources of Variance | df | Mean Square | F | p |
|---|---|---|---|---|
| Grade | 2 | 3.25 | .71 | n.s. |
| Gender | 1 | .53 | .12 | n.s. |
| Grade by Gender | 2 | 3.24 | .71 | n.s. |

*The higher the score, the greater the understanding

Table 4

Knowledge About the Ratings by Grade and Gender

| Gender: | Grade: 4th | 8th | 10th |
|---|---|---|---|
| Girls | 3.00 | 3.55 | 3.57 |
| Boys | 2.37 | 4.06 | 3.96 |

| Sources of Variance | df | Mean Square | F | p |
|---|---|---|---|---|
| Grade | 2 | 59.03 | 26.31 | <.001 |
| Gender | 1 | 1.66 | .74 | n.s. |
| Grade by Gender | 2 | 14.02 | 6.25 | <.01 |

*The higher the score, the greater the knowledge about the ratings

Table 5

General Use of Ratings by Grade and Gender

| Gender: | Grade: 4th | 8th | 10th |
|---|---|---|---|
| Girls | 11.92 | 7.58 | 7.12 |
| Boys | 12.34 | 7.68 | 7.13 |

| Sources of Variance | df | Mean Square | F | p |
|---|---|---|---|---|
| Grade | 2 | 1106.06 | 91.75 | <.001 |
| Gender | 1 | 3.03 | .25 | n.s. |
| Grade by Gender | 2 | 1.70 | .14 | n.s. |

*The higher the score, the greater the general use of ratings

Table 6

Specific Use of Ratings by Grade and Gender

| Gender: | Grade: 4th | 8th | 10th |
|---|---|---|---|
| Girls | 14.8 | 14.5 | 13.4 |
| Boys | 15.6 | 14.6 | 13.8 |

| Sources of Variance | df | Mean Square | F | p |
|---|---|---|---|---|
| Grade | 2 | 56.84 | 4.85 | <.01 |
| Gender | 1 | 11.15 | .95 | n.s. |
| Grade by Gender | 2 | 2.78 | .24 | n.s. |

*The higher the score, the greater the specific use of ratings

Table 7

Mis-Use of the Ratings by Grade and Gender

| Gender: | Grade: 4th | 8th | 10th |
|---|---|---|---|
| Girls | 5.65 | 4.55 | 4.26 |
| Boys | 5.64 | 4.57 | 4.79 |

| Sources of Variance | df | Mean Square | F | p |
|---|---|---|---|---|
| Grade | 2 | 57.70 | 23.03 | <.001 |
| Gender | 1 | 4.78 | 1.91 | n.s. |
| Grade by Gender | 2 | 3.71 | 1.48 | n.s. |

*The higher the score, the greater the mis-use of the ratings

Table 8

Regression Correlates of TV Rating Responses

| TV rating variable | Predictors | Beta | p value | Outcome |
|---|---|---|---|---|
| Attention | Family size | .106 | .02 | |
| | Grade | -.078 | .001 | R=.631 |
| | Parental Mediation | .124 | .04 | R square=.398 |
| | Sibling influence-- | | | F=14.87, p<.001 |
| | in use of ratings | .262 | .001 | |
| | in watching TV | .106 | .03 | |
| Attitude | Family size | -.129 | .02 | R=.348 |
| | Parental Mediation | .156 | .03 | R square=.121 |
| | | | | F=3.10, p<.001 |
| Understanding | None | | | |
| Knowledge | Grade | .243 | .001 | R=.370 |
| | Concern/Punishment | .117 | .05 | R square=.131 |
| | | | | F=3.59, p<.001 |
| General Use | Family size | .132 | .01 | |
| | Grade | -.285 | .001 | |
| | Sibling influence-- | | | R=.673 |
| | in use of ratings | .190 | .001 | R square=.454 |
| | Parental Mediation | .226 | .001 | F=18.74, p<.001 |
| | Friends | -.074 | .09 | |
| Specific Use | One parent family | .154 | .05 | |
| | Sibling influence-- | | | R=.459 |
| | in watching TV | .153 | .05 | R square=.211 |
| | Friends | -.088 | .05 | F=3.26, p<.001 |
| | Parental Mediation | .206 | .05 | |
| | Decision Making | .197 | .01 | |
| Misuse | One parent family | -.105 | .05 | |
| | Grade | -.230 | .001 | R=.400 |
| | Exposure to TV | -.097 | .09 | R square=.161 |
| | Parental Mediation | .137 | .05 | F=4.31, p<.001 |